

Course Overview

This course is the second year of a two year study of Algebra, and the class begins with a review of some of the concepts from the first part of Algebra 1, including functions and writing and graphing linear equations. Once these concepts are solidified, students learn new concepts of algebra, starting with systems of equations and inequalities. They explore multiplying and factoring polynomials, and solving and graphing various functions and equations including exponential functions, quadratic functions, radical equations, and rational equations. Great emphasis is placed on using multiple pathways for problem solving and on solving real-world problems using algebraic methods. A short geometry unit is included to cover those eighth grade standards. Students are challenged to solve problems logically and to represent problems in various ways. They also read about math and write explanations for their answers, thus making mathematics an exercise in problem solving and articulation as well as computation.

Text: *Algebra 1*, Prentice Hall

Supplies:

- 1 **PURPLE** 1" binder just for Algebra with 5 dividers
- looseleaf paper
- 3 lead pencils WITH A MANUAL PENCIL SHARPENER or mechanical pencils with extra lead*
- WLPCS planner
- colored pencils
- straight edge (ruler)
- Graph paper (1 notebook or 1 package of)
- **TI 34 Multi-View Calculator – REQUIRED!!**

* ABSOLUTELY no pens may be used when solving algebraic problems (pens may be used only when writing complete sentences).

The rule is: **"Do it in pen, do it again!"**

Grading Policies:

Tests/Projects	45% of grade
Quizzes	30% of grade
Homework	10% of grade
Participation	15% of grade

The grading policies are an estimation of how your grade will be determined. The instructor reserves the right to take into account other factors such as improvement, effort, and other intangible factors when determining your course grade.

Tests, Quizzes and Projects

Students will take a test after every unit. Tests will consist of multiple choice, short-answer and problem-solving problems. Each test will focus on the preceding chapter but will require mastery of previously-learned material.

There will be a FINAL EXAM in June worth 20% of the year grade.

As a math department, we value student learning. For this reason, we believe that students should have the opportunity to use assessments as learning tools. We encourage students to review their

tests and quizzes with their teachers in order to learn from their mistakes. Additionally, students have the option to retake one test (not quiz) per semester if they score below an 85%. Students must schedule a time to meet with the teacher AND complete test corrections (for no credit) before a retake to demonstrate that they have made the effort to understand the concepts. Retakes must be completed within two weeks of the original test and will be taken either during a study hall or in tutorial. The teacher will average the two grades to determine the test grade. This averaged grade will cap at 85%.

Students will take at least one quiz per week. These quizzes are shorter than tests and focus on the skills learned in the previous few lessons.

There will be approximately one project per quarter, with some choice available with respect to content and presentation. Students will be given project rubrics, and grades will be determined based upon these individual rubrics.

Students will save all graded work in their purple math binders.

Homework

Twenty minutes of homework will be assigned daily to reinforce concepts learned in class. By completing homework, students are essentially preparing for assessments every night. Homework is for practice, and is not a summative assessment; therefore homework is graded on completion rather than accuracy. On most weekends, students will be assigned a **weekend word problem** in lieu of the typical practice problems.

Study Sheets: Students will recopy important class information from their class notebook onto a study sheet to be kept in their binders. Students will create one study sheet per chapter and should save the study sheets for upcoming tests AND the final exam. **RE-READ, RE-WRITE, REMEMBER!**

Practice Problems: Homework problems will be completed according to the teacher's template. Writing during math homework is **required nightly** in the following ways:

- If a student cannot solve a problem at home, they must write about the problem. What do they think they should do? What steps have they taken to try to find a solution?
- Students must describe their problem solving process on the starred problem of the night.

Students will be practicing this new method of completing math homework in class and will be given samples.

Below is the WLPCS Late Homework/Project Policy

The point of daily homework is to advance a student's learning through independent practice and/or exploration. Homework and classwork are often intertwined and homework provides the catalyst for a day's lesson. We will therefore not accept late homework; students who turn in completed homework on the day it is due (the degree of completion the province of the teacher) will receive full credit; **students who fail to turn in homework on the day it is due will not receive any credit for that daily assignment.** Individual teachers will grant exceptions to this policy for illness, significant family events, or anything else a teacher deems worthy of exception. Because we take seriously our responsibility to teach students how to manage their time and plan for a long-term project, we take a different approach with anything that requires more than one or two days to complete. **Students who complete a long-term project on time are eligible to receive full credit; students who hand in a long-term project one day late can receive no better than a B, and students who turn in a long-term project two days late can receive no**

better than a C. At the end of the two-day period, teachers may decide to give students partial credit for the work they have done on a project or they may decide to give a student a failing grade. Individual teachers will determine any exceptions for illness, significant family events, etc.

Participation/Classwork

Participation and classwork make up 15% of the total grade. Students will rate themselves each day on their participation. I will view these ratings daily and adjust them if there is the need.

Do Nows, classwork, group work, completing daily exit slips, which include a writing problem, an algebraic problem and an optional challenge problem, are also a major part of the participation grade.

Wikispace/PowerSchool

The middle school wikispace (wlpcsmiddleschool.wikispaces.com) is available for you to check important class information. You can use the Algebra page to find helpful links to math websites, download worksheets, complete brain teasers, and, of course, see your homework assignments and upcoming quizzes, tests, and projects. **THE WIKISPACE SHOULD NOT REPLACE YOUR PLANNER!**

PowerSchool is available for you to use to check your grades. PLEASE utilize PowerSchool before emailing your teacher with questions regarding your grade.

General Course Schedule:

Unit One: Functions and Linear Equations: August-September

Unit Two: Systems of Linear Equations and Inequalities: October-November

Unit Three: Rational Numbers, Exponents and Exponential Functions: November-January

Unit Four: Geometry, Statistics and Probability: January-March

Unit Five: Polynomials and Quadratics: March-May

Class Expectations:

1. You must adhere to ALL of the rules in the student handbook. Two crucial rules for math class:

- **PARTICIPATE!**
- **Track and respect the speaker and/or action of the class.**

2. Work to the BEST of your ability every day. Follow the mathematical practices!

- **Make sense of problems and persevere in solving them.**
- **Reason abstractly and quantitatively.**
- **Construct viable arguments and critique the reasoning of others.**
- **Model with mathematics.**
- **Use appropriate tools strategically.**
- **Attend to precision.**

Attendance

You are expected to arrive READY (see class poster) for each class session.

Attendance is vital to your success in this class. Since our time is so valuable, the policy on absences is necessarily strict: ***unexcused absences*** will result in a loss of participation points for that day and students will not be permitted to make up work from those days.

An ***excused absence*** will not count against you. An excused absence is an emergency or sickness, properly documented by a note from your parent or guardian. Students are responsible for all homework, tests, quizzes, and projects assigned on a day when they are absent. YOU must ask your teacher for your missing work, and check the wikispace and/or extra handouts folder next to the inbox. Please remember to ask for all missing classwork and notes as well as homework. **You are HIGHLY encouraged to attend tutorial after an absence.** You will have the same number of days to make up the homework as you were absent.

Thinking Ahead to High School:

High School Recommendations:

If you are considering attending high school elsewhere and need a recommendation from your teacher, you **must** provide **two weeks** notice, and provide a **self-addressed, self-stamped envelope** for the school. If the recommendation is to be filled out online, the request must be sent to me via email two weeks in advance. Be sure that you fill out all parts of the recommendation that need to be completed by a student or guardian first. I will mail all recommendations directly to the school; for confidentiality purposes, I cannot return forms to you.

Also, please keep courtesy in mind. I prefer that you, the student, ask me in person to complete a recommendation. I will not complete recommendations that I find on my desk or in my mailfolder, unless you have already asked me to complete one.

Honors Courses at WLPCS Upper School:

If you are interested in taking Honors Geometry next year, you must receive a B+ or higher in this course and must have your Algebra 1B teacher's recommendation.

I look forward to a wonderful school year with you!

Ms. Scheld